IPR-Review
Vol. 1 No. 02, July 2018, pp 35-44

STATE ROLE PROTECTING GENETIC RESOURCES IN A PATENT LAW REGIME IN THE ERA OF THE ASEAN ECONOMIC COMMUNITY

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Received : 15 March 2018 accepted : 22 May 2018

Genetic Resources (GRs) is an asset that is potentially economically and become raw material for the development of biotechnology and pharmaceuticals. Utyilization and commercialization Genetic Resources (GRs) usually involves traditional knowledge which resulted in the case of theft, misappropriation through patents and plant variety protection. To protect Genetic Resources (GRs) and traditional knowledge requires an active role of the State. What is the role of the State in protecting and increasing the economic potential of Genetic Resources (GRs) and traditional knowledge to preserve Genetic Resources (GRs) and traditional knowledge, as regulated by Patent Act Number 13of 2016 in the AEC Era ? Related to the role of the state there is in Article 33 paragraph 2 and paragraph 3 of the 1945 Constitution, the state embodies the prosperity of the people. This does not conflict with Article 3 and Article 15 of the Convention on Biological Diversity (CBD). One effort , by including *Prior Informed Cons ent* in Article 26 and sanctions Article 132 of Law No. 13 of 2016 concerning Patents. However, the implementation also needs to be supplemented by a joint agreement governing open access and benefit sharing. In fact, the laws is still not optimal in regulating the role of the State, because the mechanism for granting access and sharing of benefits, administration to manage the utilization of Genetic Resources (GRs and traditional knowledge by foreign parties is not yet regulated. Therefore, the right strategy is needed in the form of regulations, institutions and community empowerment so that the protection of Genetic Resources (GRs) and traditional knowledge can be optimized.

Keywords: Genetic Resources, Traditional Knowledge, Asean Economic Community, Patent Law.

A. Background

The increasingly globalized condition of the ASEAN community has led to the creation of an integrated region known as the ASEAN Economic Community abbreviated as AEC. One of the goals of the establishment of the AEC is to reduce the gap between the countries in ASEAN, related to economic growth and to reduce the dependence of ASEAN countries on countries outside non-ASEAN countries. It is expected that with the AEC it can produce a single trading bloc that can handle and negotiate with non-ASEAN exporters and importers.[1] In order to realize its objectives, the AEC focuses on 4 pillars, namely: First, countries in the ASEAN region are made into a production-based market unity, hence the flow of trade, investment, large amounts of capital and labor are no longer a barrier. Second, Mea forms an economic region with high competence, one of which is intellectual property rights. Third, Mea forms a felt economic area by prioritizing Small and Medium Enterprises, abbreviated as SMEs. Fourth, the MEA fully integrates the global economy. Therefore, judging from the four focus targets that the AEC wants to achieve, the role of intellectual property rights becomes important, because IPR covers almost all sectors of life, especially in trade. However, the global conditions currently represented by the AEC pose its own problems for Indonesia.

If intellectual property rights become one of the determining pillars in the framework of the AEC, it will also have an impact on the protection of genetic resources, hereinafter abbreviated Genetic Resources (GRs). Intellectual property rights(IPRs) focus on using GRs for the development of technology in the fields of biotechnology and pharmaceuticals through patent law regimes or protection of plant varieties. Therefore , Indonesia as the number

two country in the world that has GRs wealth consisting of 15.3% of the world's biodiversity is in Indonesia. Regarding world medicinal plants, as many as 30 thousand species from 40 thousand s of the world's species exist in Indonesia. N Amun, until now recorded only 300 species are utilized by industry. In addition, the Ministry of Environment estimates that the value of Indonesian medicinal plants reaches a value of 14.6 billion dollars[2]

Seeing the high economic value inherent in SDGs, Indonesia has become vulnerable to acts of piracy in biodiversity, including GRs. So that it can be seen several cases related to piracy GRs developing countries. Among them is one case of piracy of genetic resources that has occurred in India with the case of " *Basmati Rice* " which is a type of rice that has a characteristic fragrance. This type of rice grows since thousands of years ago at the foot of the Himalayan mountains next to India. *Rice Basmati* is registered patents and trademarks by the company *Rice Tec Inc* . US company as the holder of *Basmati Rice.* As a result of the theft of these rice seeds, the Indian Government brought the case to the WTO hearing and this case was won by India. As a result of the patent application that was made on *Rice Tec Inc.* caused legal issues that caused three consequences, firstly the collective intellectual uptake of Indian native peoples who are the biodiversity heritage of Indian farmers' genetic resources, secondly taking Indian markets and exporters, and third, causing confusion consumers because *Rice Tech Inc.* uses the name Brasmati for rice derived from Indian rice but not grown in India and therefore is not of the same quality. [3]

In Indonesia the same case had occurred , namely in 1995, where cosmetics company *Shiseido* from Japan had carried out a biological hijack by filing 51 patent applications of medicinal plants and herbs native to Indonesia. Biological piracy is carried out secretly and at that time the *Shiseido* company already has 9 patents obtained from native Indonesian plants, including *rapet wood, kemukus, tempuyung, belantas, mesoyi, pule, pulowaras* and syntox, all of these ingredients have anti-aging properties . In addition, there are some plants that are used as a treatment such as tobacco, cassava for cancer cure. In addition, native Indonesian plants have received patents in addition to Japan as well as in several countries including Britain, Germany, France and Italy. The violation of medicinal plants was resolved by one of the non-governmental organizations in Indonesia through a lawsuit to the Japanese Court that finally *Shiseido* cosmetics company canceled its infringing patent.[4] One of the pirates of genetic resources carried out by a foreign party that occurred in June 1995, resulted in patents in Europe for neem oil mushrooms and US patents for inventions regarding the *azadirachtin* formula . This violation was sued by indigenous groups which are Indian farmers and non-governmental organizations based in Germany. Both patents have the same claim regarding the control of fungi on plants from neem tree seeds. This patent is considered not new because it has been traditionally processed by Indian society to eradicate mold and insects. [5]

This GRs wealth can be used as an asset to increase economic potential in the AEC era. This is reasonable considering that GRs is the basic ingredient for the development of the biotechnology industry, including the pharmaceutical industry, which is generally protected under the patent law regime. However, Indonesia has not yet reached the stage of developing the biotechnology industry that uses GRs as its raw material and traditional knowledge as preliminary information for pharmaceutical development . This capability u mumnya owned by developed countries, y ang rife develop industrial biotechnology , including pharmaceutical, whose legal protection through patents for pharmaceutical and industrial food-supported protection of plant varieties.

The economic potential of GRs utilization and commercialization usually involves traditional knowledge. this is the me n thrust theft, abuse of GRs and or traditional knowledge through the stem patent . In addition, other violations committed were the collection and collection of GRs and traditional knowledge without the permission of the owner, namely the indigenous people and their country of origin. [6] So that it can be said that traditional knowledge is part of the GRs. The existence of traditional knowledge makes GRs can be developed into products or processes that can be used commercially. So that between GRs and traditional knowledge are interrelated, because traditional knowledge is an *intangible* component of GRs.

So far the Government has sought to protect SDGs by ratifying the *Convention on Biological Diversity (CBD)* with Law Number 5 of 1994. This convention is abbreviated as CBD. Furthermore, the Government of Indonesia also ratified the Nagoya Protocol with Law No. 11 of 2013 Ratification of the Nagoya Protocol on Access to GRs and the Fair and Balanced Profit Sharing Arising from Their Utilization of the Convention on Diversity in Genetic Resources. Both of these international agreements are international agreements that focus on the protection of GRs and traditional knowledge.

Guided by konvens i and protocol above, the protection of GRs and traditional knowledge in particular from patent regime, has been published under Article 26 of Law No. 13 of 2016 incorporated the provisions of the Mandatory me reveals yet k 's with clear and true origin of genetic resources and / or traditional knowledge in the description of patents. This provision is in line with the Nagoya Protocol intended in the framework of *Access Benefit Sharing* as an effort to protect Genetic Resources and Traditional Knowledge (GRTK). [7]

In this case the Government is trying to play a role by starting to include the provisions of GRs protection and traditional knowledge in regulations. But, the role of the state government in this case has not been maximized. This happens because of the conflict of interest between developing countries, including Indonesia and developed countries, initiating intellectual property rights. Therefore, it can be seen that, developed countries are divided into two groups, namely groups that refuse to amend Article 27 paragraph 3 letter b of the TRIPs which states that GRs and traditional knowledge remain patent objects and may not hinder new inventions. This group is supported by Japan, America, Canada and Australia. Other groups not taking up positions are Singapore and Malaysia. Even these two groups do not want the disclosure of GRs countries of origin and traditional knowledge. Therefore, considering that at the international level there is no understanding in protecting GRs and traditional knowledge, the Government's attitude includes the inventor's obligation to disclose the country of origin of SDGs and traditional knowledge when applying for a patent in the patent description, in accordance with Article 26 of Law No. 13 of 2016 is a courageous attitude and is the first step to follow up on regulation and implementation to protect GRs and traditional Indonesian knowledge. However, there is still a long way to go for the state to obtain its sovereignty, in accordance with Article 33 paragraph 2 and paragraph 3 of the 1945 Constitution.

C. The Problematic

Relating to the protection of GRs and traditional knowledge cannot rule out the role of the state as the holder of sovereignty. However, to obtain its role, the State needs the right strategy considering that so far the role of the State is almost non-existent . when there is piracy and commercial use by foreign parties which harms the preservation and welfare of the nation which results in the loss of economic potential through the patent law regime and protection of plant varieties. Hence, the problem: b How can the State's role in protecting GRs knowledge and traditional in order to preserve and enhance the economic potential of SDG and knowledge tradision al have arranged Act No. 13 of 2016 on Patent in MEA era ?

B. The importance of Genetic Resources and Traditional Knowledge To Preserving Genetic Resources in Indonesia

One of the international agreements related to the preservation of biodiversity including genetic resources is the *United Nations Convention on Biological Diversity* , abbreviated as CBD, is an international agreement on the conservation and sustainable use of biological resources and regulates the obligations of the state in exploitation to support a fair distribution of benefits in utilization components of genetic resources, which are one component of biological resources. In CBD, genetic resources are known as Germplasm or genes which are plant, animal or other creatures that contain functional units of inheritance that have value, both actual and potential. In its development, this gene is a source of offspring traits that can be utilized in the engineering of creating superior seeds. In CBD, the notion of biological diversity is often associated with Germplasm.

In fact, biodiversity has a broader understanding because it includes the diversity of organisms in nature, both wild and cultivated, including the environment. Whereas the understanding of Germplasm is narrower because it only covers the diversity of genetic resources.[8] In this case, SDG which includes all species of plants, animals and microorganisms and ecosystems in which all species and microorganisms are holistically part. On the other hand traditional knowledge is an aspect related to genetic resources that are *intangible* components of SDGs.[9] A da some understanding of the SDG, including SDG is the genetic material that has the potential and actual value, while the genetic material is all sorts of material association with plants, animals, microbes or other original materials containing units derived function.[10] In Article 2 *of the Convention on Biological Diversity* hose jutnya abbreviated as CBD; understanding GRs is genetic material that has a use value, both actual and potential. Furthermore, genetic material is explained as a functional unit of heredity found in plants, animals and micro-biology. [11] Protection of GRs includes in situ protection of the protection of maintaining ecosystems and natural habitats in their natural environment, where the environment in particular develops.[12] Ex situ protection is an effort to conserve plants outside

their original area by using plant storage systems such as kebon raya, or seed banks.[13] Protection *on farm* is protection related to *in situ* or *ex situ is* an effort to protect the development by farmers through selection from generation to genaeration without the intervention of plant breeders.

Based on this understanding, biodiversity can be grouped into three categories, namely gene diversity, species diversity and ecosystem diversity. Gene diversity shows the variation of genes within a species, for example the diversity of genes found in hundreds of traditional varieties of rice in India. Species diversity shows the diversity of species in an area. This diversity is measured by the diversity of animals, plants, bacteria and so on. Ecosystem diversity includes the overall diversity of species and genes found in areas connected to a particular ecosystem.[14] Meanwhile biodiversity only covers genetic diversity, species diversity, ecosystem diversity, conservation and conservation of genetic resources.

Biodiversity or *biological diversity* is the term used to explain the diversity, variability and uniqueness of genes, species and ecosystems. In other words, biodiversity is the diversity of life on earth, including human diversity. [15] Based on the *United Nations Convention on Biological Diversity* that has been ratified by the Government of Indonesia with Law Number 5 of 1994, biodiversity is diversity among living things from all sources including land , sea and other ecosystems and ecological complexes which is its diversity, including diversity within species, between species and ecosystems . Based on this understanding, biodiversity can be grouped into three categories, namely gene diversity, species diversity and ecosystem diversity. Gene diversity shows the variation of genes within a species, for example the diversity of genes found in hundreds of traditional varieties of rice in India. Species diversity shows the diversity of species in an area. This diversity is measured by the diversity of animals, plants, bacteria and so on. Ecosystem diversity includes the overall diversity of species and genes found in areas connected to a particular ecosystem.

Protection of GRs and traditional knowledge through a long journey, initially using the concept of the *Common Heritage of Mankind* which is abbreviated with CHM that emphasizes the absence of state sovereignty over its territory related to GRs The concept of CHM is aimed at food security and health.[16] The advantage of the CHM concept is that in the use of SDGs and traditional knowledge, it is not necessary to obtain a permit from the country of origin, but the results can be accessed by all countries, not limited to those who access it. Because of the many contradictions of developing countries this concept is only applied to areas outside state jurisdiction. So this concept is only maintained to facilitate the exchange of GRs in maintaining the world's food and health needs.[17]

Next is the concept of Intellectual Property Rights, abbreviated as IPRs . This concept is in Article 27 paragraph 3 letter b TRIPs has an individual concept, because the concept of IPR aims to enable individuals to develop intellectual work using SDG raw materials and traditional knowledge without any compensation to the owner's country. Therefore ting ginya contention then the European Economic Community which joined the *World Intellectual Property* O*rganization (WIPO)* that ratified *the United Nations Convention on Biological Diversity* in 1992, which has now been ratified by 188 developing countries including Indonesia, as outlined in the Act No. 5 of 1994 concerning Ratification of the United *Nation Convention on Biological Diversity* (State Gazette. 1994-41, Supplement to the State Gazette Number 3556} [18] aimed at members i the opportunities for developing countries to have their sovereignty manage SDG and traditional knowledge. Nature *of Article 8 (j)* of the CBD tries to give a definition and understanding which provides guidance on the scope of the biodiversity of the genetic resources and *traditional knowledge* that is: [19]

> *"Demonstrating a system of knowledge, innovative creations and cultural expressions that have generally been passed on from generation to generation which in general have been developed non-systematically and continuously in response to a changing environment. The scope or category of traditional knowledge includes knowledge, agriculture, scientific knowledge, technical knowledge, ecological knowledge, medical knowledge, knowledge related to biodiversity, folklore, dance music, craft design and geographical indications ".*

Based on the *CBD, it* can be seen that *traditional knowledge is* divided into 3 (three) groups, namely works of *art* , geographic indications and biodiversity which include genetic resources and traditional knowledge. GRs is characteristically related to ownership and control divided into three groups; GRs in its original form, GRs that was developed traditionally and SDG that was traditionally developed and GRs that was developed in modern biotechnology. Character differences are adjusted by stakeholders.[20] So that it can be said that to avoid piracy of genetic resources and loss of biodiversity,

the European Union entered into an agreement on biodiversity protection by the issuance of the *Convention on Biological Diversity* which is abbreviated to CBD which can specifically be found in *Article* 8 (j) CBD. Furthermore, in the concept of CBD the *sovereign right* concept develops which bridges the interests of developed and developing countries. The *sovereign right* concept reflects the idealism that a *country of origin* has legal ownership of SDGs in its territory and is entitled to control, take and use it. [21] In this concept the state is granted the right to regulate GRs access and requirements in its territory. It's just that the state's rights are limited to SDGs *in situ* , so the state must have the ability to negotiate to be able to implement this concept, because the rules of the game are based on contracts.

D. Research methods

1. Types and Properties

This research uses normative juridical research type, because the study focuses on the application of positive law, namely Law No. 13 of 2016 concerning Patents, Convention on Biological Diversity, 1945 Constitution. To examine the topic of this research, a legislative approach is carried out relating with a central theme, namely the protection of GRs against patents[22] .. The nature of the research used is descriptive only to present and analyze data to be meaningful and communicative.[23] Research with descriptive analysis illustrates the role of the state in protecting GRs from piracy acts carried out by foreign parties using the means of the patent law regime.

2. **Breakfast** .

Data and Data Collection Techniques

To support this normative research the main data is secondary data which is data that explores the principles and legal norms contained in Law No. 13 of 2016 concerning Patents and CBD. Secondary data consists of primary legal material, namely Article 26 paragraph 1 to paragraph 3, Article 132 paragraph 1 letter b, Patent Law, and *Article 3* and 8 letter j CBD added to the *Nagoya Protocol* . . This study also uses the nature of descriptive research in order to illustrate the role of the State in protecting SDGs . Secondary data collection techniques are carried out with literature study.

C. **Data analysis**

In this study, a qualitative analysis method was chosen based on the consideration that the analyzed data are diverse and have conflicting value concepts. Qualitative research tends to use a small sample of SDG protection according to the Patent Law and the role of the State whose results are then generalized to a broader scope.[24] In conducting a qualitative analysis, the data that has been collected is fragmented according to their respective categories. Then interpreted in an effort to find answers to the problems contained in this study.

E. Analysis of the State's Role in Protecting SDGs and Traditional Knowledge to Preserve and Increase the Economic Potential of SDGs and Traditional Knowledge Based on Law Number 13 Year 2016 Regarding Patents in the MEA Era

Related to the protection of GRs and traditional knowledge, it requires a sovereign and powerful country to regulate its territory in accordance with the country's objectives. Therefore, the CBD tries to accommodate the interests of developing countries, including Indonesia, in their desire to protect their biological wealth, including GRs and traditional knowledge, according to the provisions in Article 8 letter j CBD. Furthermore, the role of earapun is in the CBD. This can be seen in Article *3 of the CBD namely;*

> *each State has the sovereign right to utilize its resources in accordance with its own environmental development policies, and the responsibility to ensure that activities carried out within its jurisdiction or control will not cause damage to the environment of other States or regions outside the boundaries of its national jurisdiction* .

Berdasarka n Article 3 of the CBD a sovereign country to regulate access in its territory SDGnya means *in situ*. However, *ex situ is* not authorized. Furthermore, in Article 15 paragraph 1 the CBD states:

> Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national government and depends on its national legislation.

In Article 15 paragraph 1 the CBD is quite firm in regulating, that the state has the right to maintain SDG in its territory. The form of protection can be seen in Article 15 paragraph 4 of the CBD which states that to obtain SDGs and knowledge from other countries , *it* must be based on mutual agreement and depends on the requirements in this article. Furthermore, paragraph 5 states that the taking *of genetic resources shall be based on consensus of the Party providing such resources which has been previously informed* , unless specified differently by the Party of the owner.

Therefore, it can be said that Article 15 of the CBD, explained about the mechanism of access to

genetic resources aimed at increasing transparency in the patent application process, by conveying information about the origin of the invention . In paragraph (1) the State's authority to determine access to genetic resources is determined . . Based on paragraphs (4) and (5) it is possible to regulate access to genetic resources based on mutually agreed agreements. [25]

One of the mechanisms of state control over access to genetic resources and traditional knowledge is the *Prior Informed Consent* (PIC) as referred to in Article 15 paragraph (5) of the CBD. Furthermore, in Article 6 (1) p ro tokol Nagoya explained that access to genetic resources should be subject to approval in respect of a bag and Informed (*Prior Informed Cons ent) in brief* (PIC) d a ri-party resource providers. Similarly, also stipulates that the traditional knowledge that te rkait with genetic resources held by local communities accessed prior informed consent and involvement of the community lok al tersebu t in the collective agreement that has been dit etapkan. In implementing the PIC , the government is obliged to adopt a legal policy concerning the mechanism of access procedures, including the licensing system in access to genetic resources and / or traditional knowledge. [26] So that it becomes an obligation for the government to regulate it structurally, namely the need to appoint an authorized institution to carry out administrative efforts starting from licensing to the making of a collective agreement which constitutes the access agreement governing the terms of access in a reciprocal way and is set forth in a mutual agreement, which called *Mutually Agreed Terms* , abbreviated as MTA.[27] Furthermore, under Article 7 of the Nagoya Protocol, the state must take legislative, administrative and policy measures to ensure that traditional knowledge can be accessed through PIC and MTA.[28] This agreement is important to protect indigenous peoples from their traditional knowledge which is subject to communal philosophy.

The second concept is the concept of IPR contained in Article 27 paragraph 3 letter b TRIPs states that:

> " *Plants and animals other than microorganisms, and biological processes to produce plants or animals other than non-biological and microbiological processes. However, Members must provide protection for plant varieties in the form of patents or effective sui generis systems or a combination of both forms of protection. . This provision will be reviewed after four years have passed since the entry into force of the Agreement on the Establishment of MOPD. "*

Pursuant to the TRIPs agreement it is possible to grant patents for genetic material and traditional knowledge through patents and certain plant varieties without regard to and incorporate PIC provisions and profit sharing. . Although the TRIPs agreement does not regulate the way patents or protection rights for plant varieties are obtained from SDGs. Therefore, in this Article the provisions that SDGs and traditional knowledge must not hinder the development of patent law and protection of plant varieties. The existence of Article 27 paragraph 3 letter b TRIPs In addition, the requirements to obtain a patent must meet the requirements for novelty, inventive steps and can be applied in industry. So that traditional knowledge is not possible to get a patent, because it is impossible to escape from the newness requirements. Under the TRIPs agreement it is possible to grant patents for genetic material and certain plant varieties. Although the TRIPs agreement does not regulate the way patents or protection rights for plant varieties are obtained from GRs. Therefore, in this Article the provisions that GRs and traditional knowledge must not hinder the development of patent law and protection of plant varieties.

The application of the IPR concept raises the pros and cons between developing countries and developed countries. This condition results in an imbalance between developing countries as developed countries. As a result, there is a conflict and disharmony between these two international agreements, namely Article 27 paragraph (3) b TRIPs that provide utilization of SDGs on patents as personal rights in global jurisdiction with the CBD. The existence of TRIPs raises the limitations of the country's sovereignty in recognizing the rights of traditional communities. So it can be said that the TRIPs me m facility patents and more support private ownership and favor industrial countries. This condition is contrary to the concept of traditional society which is based on communal nature. . [29] So that it can be said that the patent system is not in line with the CBD, because there are no restrictions for patents using SDG and traditional knowledge, the patent system does not guarantee PIC and profit sharing and there is no respect for the sovereignty of the country where the SDG originated [30] . So TRIPs are international agreements that are in conflict with the CBD. As a result, with the enactment of the CBD, it is necessary to have an amendment in Article 27 paragraph 3 letter b TRIPs. .

Therefore, it can be said that based on the CBD and Protok ol Nagya the state sovereignty needs to

be upheld. This is in accordance with the Indonesian constitution, namely Article 33 a *yat (2*) of the 1945 Constitution, namely *Production Branches that are important to the state and control the livelihoods of the people controlled by the state* . Furthermore, *in* Article 33 paragraph 3, the *earth and water and natural resources contained therein shall be controlled by the state and used for the greatest prosperity of the people.*

Based on Article 33 paragraph 2 and paragraph 3 of the 1945 Constitution, the state's authority to regulate remains with the state. Therefore, in the decision of the Constitutional Court has formulated the authority of the state is controlled by the state. State control includes the meaning of control by the state in terms of authority originating from and derived from the conception of the sovereignty of the Indonesian people over all the resources of the earth, water and natural resources contained therein, including the understanding of public ownership by the collectivity of the people and the intended source of wealth. Furthermore, the sentence "as much as possible for the prosperity of the people, then what becomes the measure for the state is the authority to take care, regulate, or manage the earth, water and natural resources contained therein. Therefore, according to the Constitutional Court, the provisions for people's prosperity are based on their effectiveness, which is divided into two ranks for the first rank, the most important thing is that the state carries out direct management such as oil and gas. In second place is causality in the administration of Indonesia's natural resources.[31] so that it can be said that the concept of *sovereign right is* most appropriate in the context of protecting SDG and traditional knowledge because this concept does not conflict with Article 33 of the 1945 Constitution, although it has not fulfilled the provisions of Article 33 of the 1945 Constitution. Therefore, the concept of *sovereign right protection of GRs is* only for *in situ* not for *ex situ*. It is time for Indonesia to fight for a sovereign nation to protect GRs widely including *in situ* and *ex situ* .

Article 8 letter j CBD also regulates the protection of *traditional knowledge* , one of which is traditional knowledge. Traditional knowledge according to the WTO perspective has special characteristics, namely:

a. A knowledge that is practiced down and down.
b. Ownership of traditional knowledge is communal
c. Traditional knowledge is the result of the interaction between discovery and nature

Article 8 (j) CBD is one of the important articles for developing countries because it has directly recognized the traditional values that decline in maintaining and utilizing SDG that cannot be denied is an aspiration for the maintenance and use of modern GRs that the majority of traditional knowledge is an intellectual work that has experienced past developments and there is still the possibility to experience developments in the future, used and passed down from generation to generation and in certain cases have been collected and published by experts.[32]

Upon receipt of the concept of *disclosure requirements* , Law No. 14 of 2001 has been revised and revoked by Law No. 13 of 2016 concerning Patents and includes *disclosure requirements* in the stem of patent law by adding formal requirements in the patent application contained in the description. If an invention uses GRs and traditional knowledge, the completeness of the documents must be accompanied by documents that indicate the existence of a PIC or an agreement between the inventor with the local community to use the GRs and the relevant traditional knowledge. This addition does not impose substantive requirements on *patentable* inventions. On the one hand, this addition will greatly assist in monitoring the use of SDGs and traditional knowledge by the pharmaceutical industry . [33]

The provisions of PIC have been regulated in Article 26 of Law Number 13 Year 2016 concerning Patents which states:

(1) If the invention relates to and / or originates from genetic resources and / or traditional knowledge, it must be clearly and correctly stated the origin of such genetic resources and / or traditional knowledge in the description.
(2) Information on genetic resources and / or traditional knowledge referred to in paragraph (1) shall be determined by official agencies recognized by the government.
(3) Distribution of results and / or access to the utilization of genetic resources and / or traditional knowledge as referred to in paragraph (1) shall be carried out in accordance with laws and international agreements in the field of genetic resources and traditional knowledge.

In Article 26 of Law-U ndang No. 13 of 2016 on Patent governing the provision of the PIC and the degree of information that should be given and the information needs to be discussed in the context of ownership associated with the pen etapan who is entitled to the member i permission. If the patent applicant does not include GRs or traditional knowledge in the description of the patent, then based on Article 132 of Law No. 13 Year 2016 Regarding Patents where the patent abolition is done because the Patent comes from genetic resources and / or traditional knowledge does not meet the provisions

as gaimana referred to in Article 26. Se added in Article 2 of the CBD there is general agreement that the PIC must contain the components of their party provider before giving permission GRs is a person authorized to give such permission. On the other hand informa potential users must submit the on GRs target and anyone who uses the GRs and should also be regulated on the distribution of profits based on the stem evaluation. [34] All this time, the regulation on the protection of SDGs is still sectoral in accordance with the interests of the respective Ministries, so there are no logistical regulations. One of them is related to the access agreement governing the terms of access in a reciprocal way and is set forth in a joint agreement, called *Mutually Agreed Terms* , abbreviated as MTA in which regulates the current *access benefit sharing* . In connection with MTA, currently there is Article 1 letter k Regulation of the Minister of Agriculture Number: 67 / Permentan / OT. 140/12/2006. Definition of MTA, which is an agreement on the transfer of genetic material which is the transfer of genetic resources accompanied by documents that explain the legality of transfer of genetic resources. However, pen gaturan MTA only limited definition, s i , while not set application settings. Therefore, in accordance with one of the AEC pillars that wishes to establish economic zones with high competence, through intellectual property rights, it is necessary to make separate regulations *sui generis* about the protection of natural resources and traditional knowledge that begins with regulations on access and utilization mechanisms must be based an access permit or PIC from the owner of genetic resources and traditional knowledge which is followed up by the applicant by entering into an access agreement with the competent authority . However, before making a separate regulation the government should make an SDG mapping and inventory of traditional knowledge in each region. To facilitate the work of mapping and inventory, it is necessary to empower indigenous peoples who are knowledgeable about SDGs and knowledge in their areas. In addition, it is necessary to increase cooperation between the center and the regions as well as indigenous peoples according to the situation. Inventory data. Inventory data is very important, because it can help the Directorate General of Intellectual Property especially patent examiners in conducting substantive examinations . The above effort is a strategy to increase the role of the State, namely the government, to realize optimal protection of SDGs and traditional knowledge in Indonesia from upstream to downstream, so that in the future there will be no piracy of SDGs and traditional knowledge by foreign parties which harms the interests of the Indonesian Nation. In addition, the right profit sharing agreement can increase economic potential that is economically beneficial for improving the welfare of the Indonesian people.

F. Closing

1. Conclusion

Protection of SDGs and traditional knowledge are important assets for the Indonesian people. therefore, the birth of the CBD especially the provisions of Article 8 letter j, Article 3 and Article 15 of the CBD provide opportunities for developing countries like Indonesia to protect their GRs and romantic knowledge. In the beginning the protection of GRs and traditional knowledge was based on the Common Heritage of Mankind which was then used by the IPR system. Both of these protections cause piracy of SDGs and traditional knowledge by high-tech developed countries so that it can be said that the patent system is not in line with the CBD, because there are no restrictions on patents using GRs and traditional knowledge, the patent system does not guarantee PIC and profit sharing and lack of respect for the sovereignty of the country where the SDG originated. Therefore, in Article 26 of Law number 13 of 2016 concerning patents, there is a state requirement that GRs and traditional knowledge as the development of patents are required for him to complete his documents by showing the existence of PIC or an agreement between inventors with local communities to use GRs and traditional knowledge. concerned. In addition, the Access Agreement regulates reciprocal access requirements and is stated in a mutual agreement, called *Mutually Agreed Terms* , abbreviated as MTA .

2. Recommendation

To increase the protection of GRs and traditional knowledge related to the country's goal of preserving and increasing economic potential, then:

1. To increase the active role of the State, it is necessary to make separate regulations on the protection of GRs and traditional knowledge that begins with regulations on access and utilization mechanisms must be based on an access permit or PIC from the owner of genetic resources and traditional knowledge that is followed up by the applicant by entering into an access agreement with authorized institutions . So that it can sustain and benefit economically from the GRs and traditional knowledge that Indonesia has.
2. Needs to be done at the level of empowerment for the Central Government to Regional Government , including the empowerment of indigenous peoples who are directly in contact with the GRs and

traditional knowledge in the region. This empowerment is carried out by jointly preparing GRs mapping in each region of Indonesia and conducting an inventory of the knowledge possessed by indigenous peoples in each region. Proper documentation and mapping of GRs and traditional knowledge will assist the Directorate General of Intellectual Property, especially patent examiners, in conducting substantive examinations of patent descriptions.

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